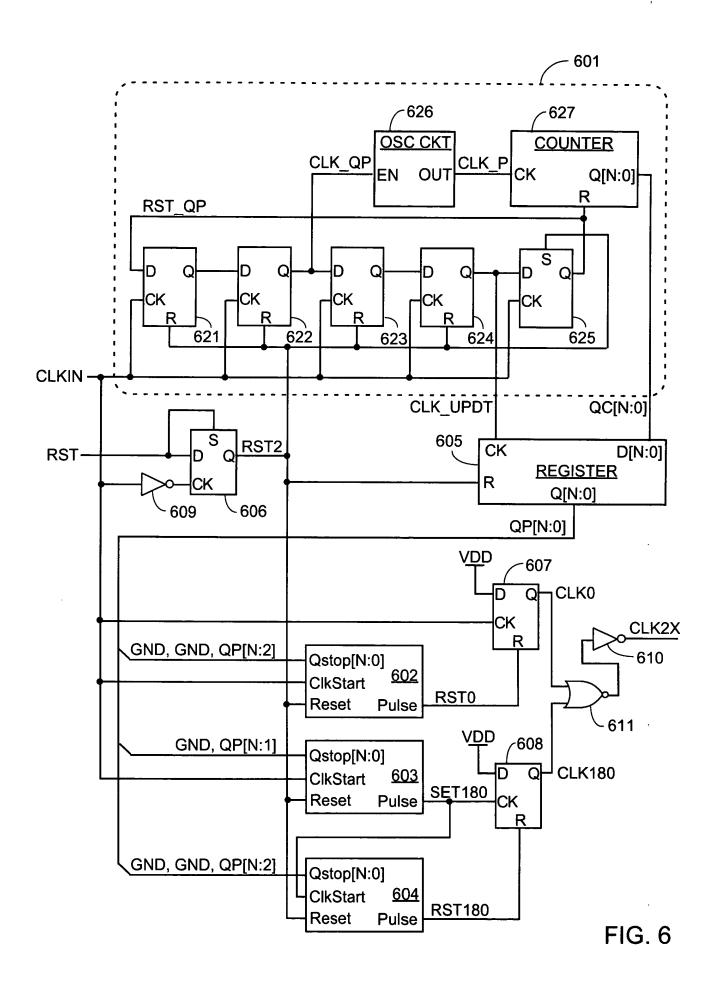


501 503 502 504 **CLKIN** Delay Chain Delay Chain Delay Chain Delay Chain CLK90 505-506 CLK180 507 -CLK270 508 -**CLK360 SELECT** 511 Clock CLK2X Generator - 509 510 **CTRL** Phase State Detector Machine

FIG. 5 (Prior Art)

(Prior Art)



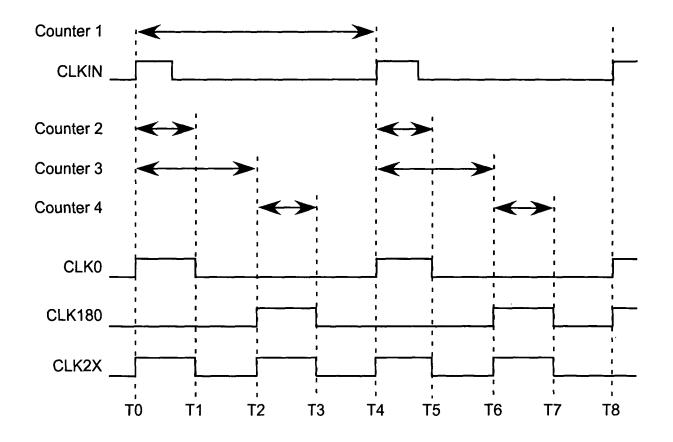


FIG. 7

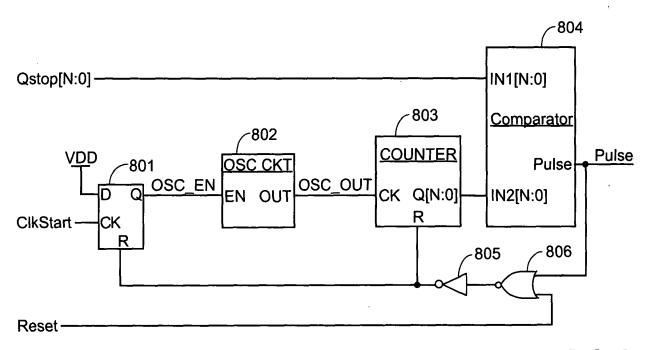
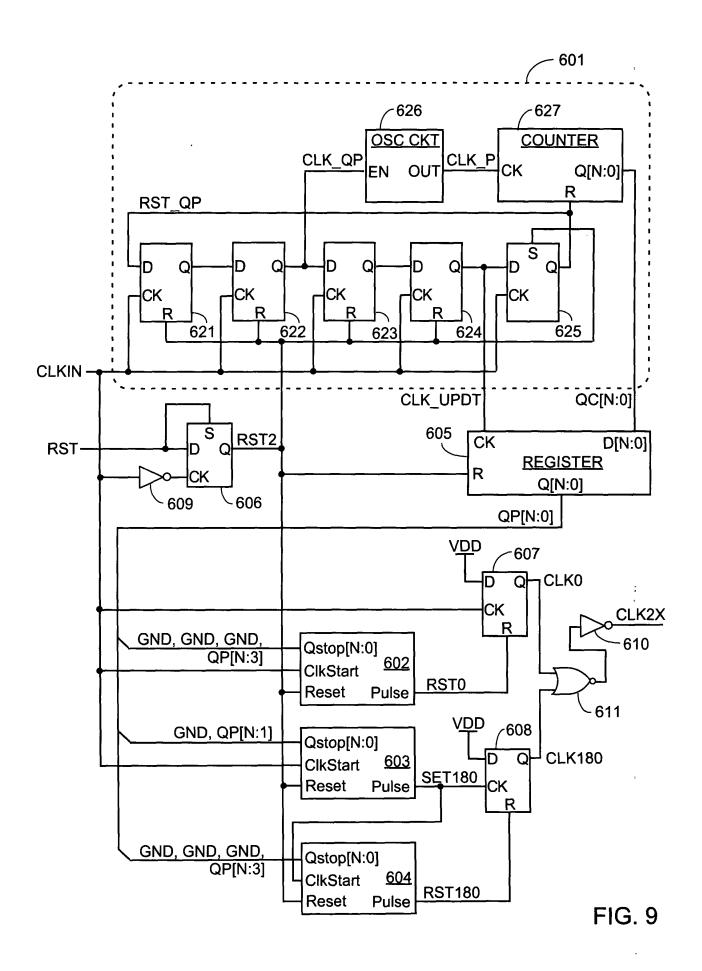
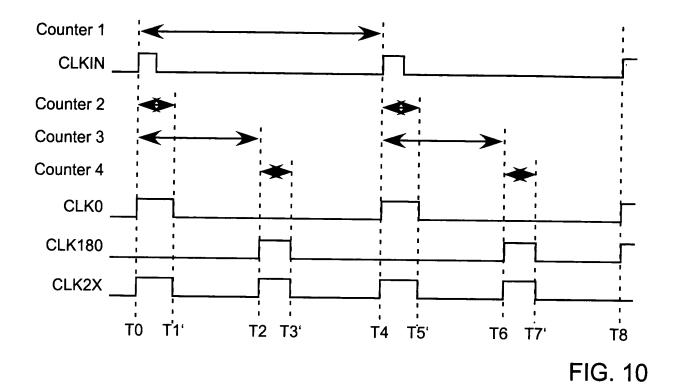


FIG. 8





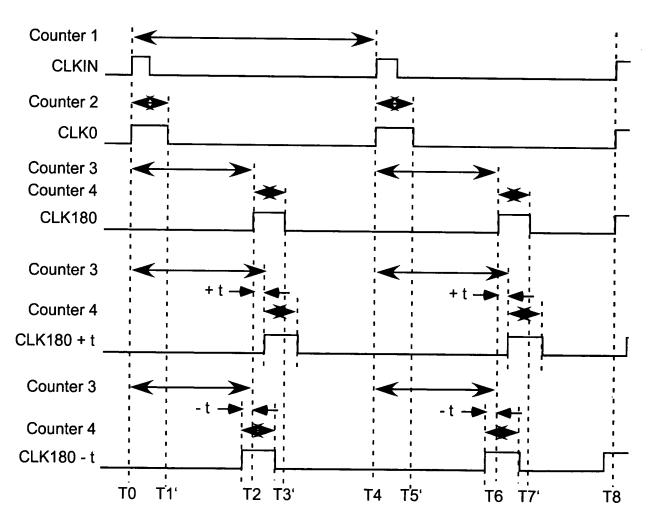


FIG. 12

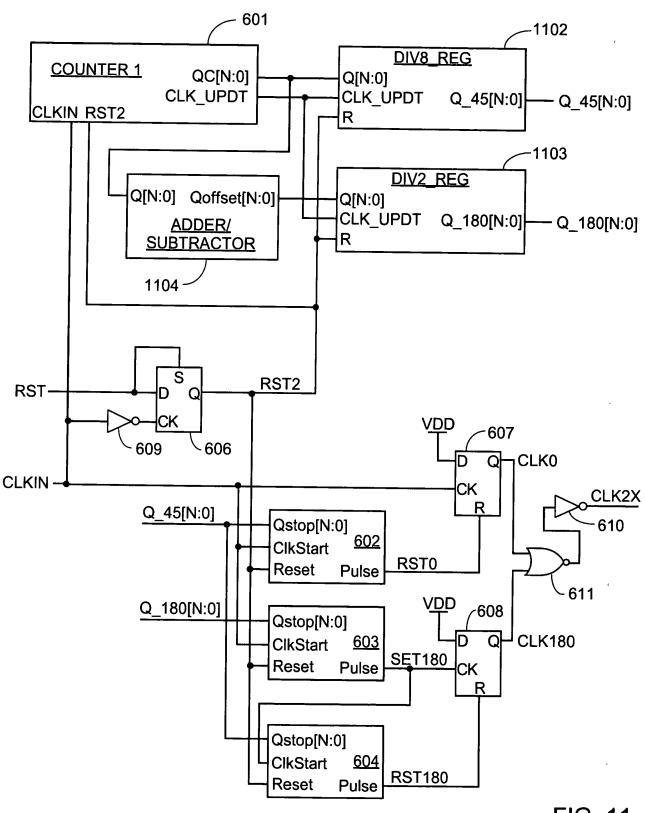


FIG. 11

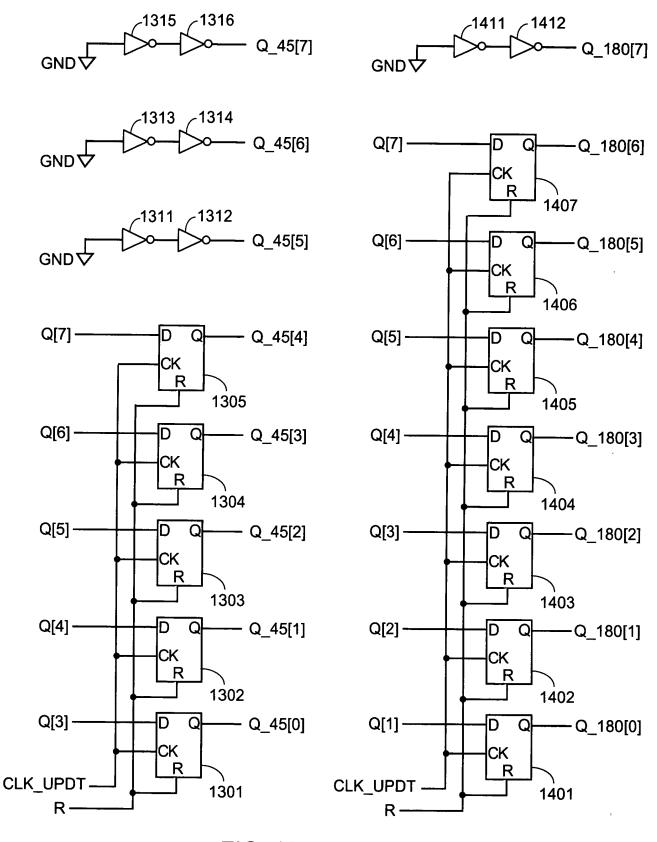


FIG. 13

FIG. 14

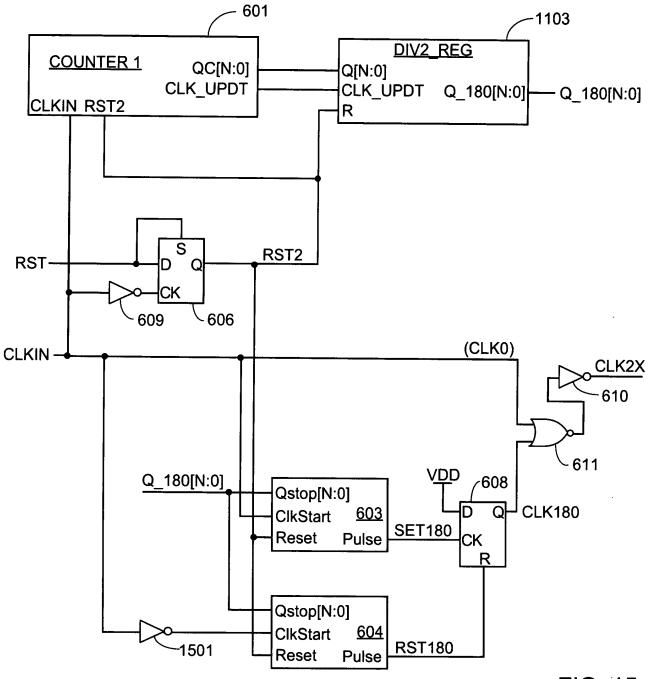


FIG. 15

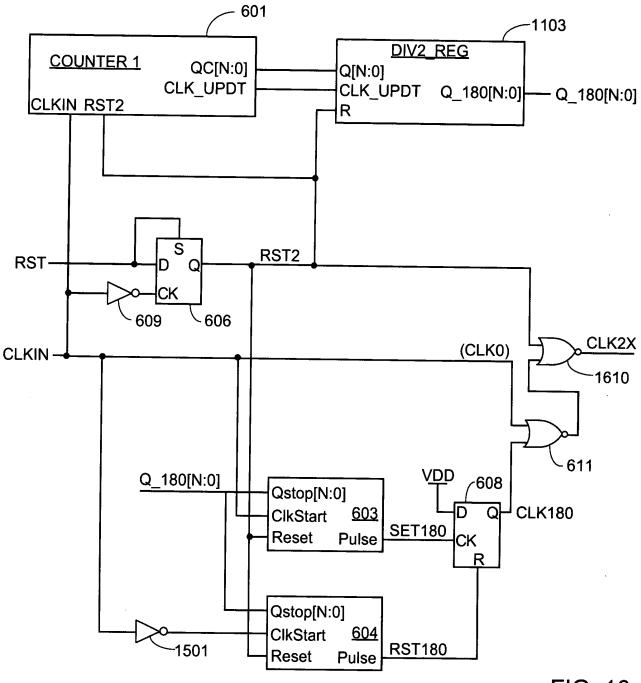
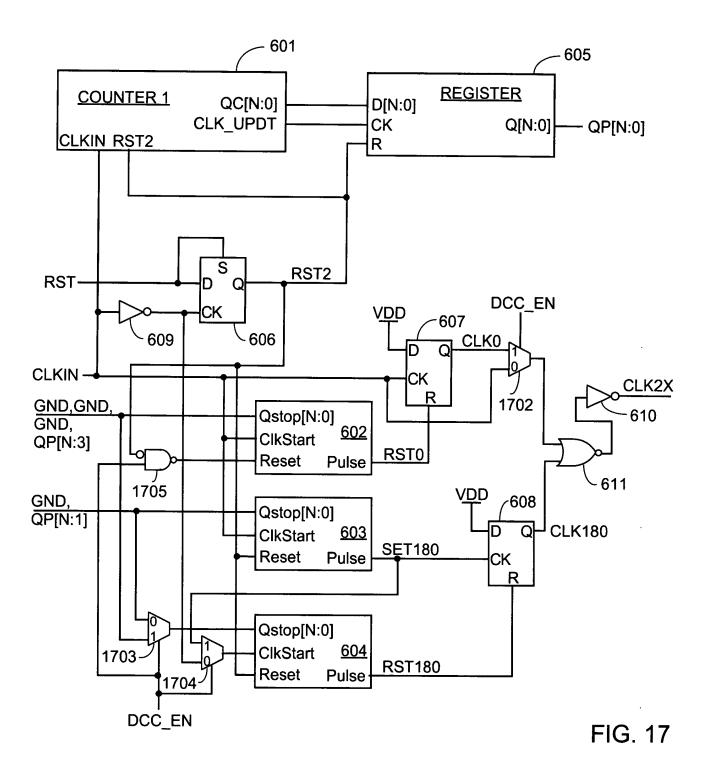


FIG. 16



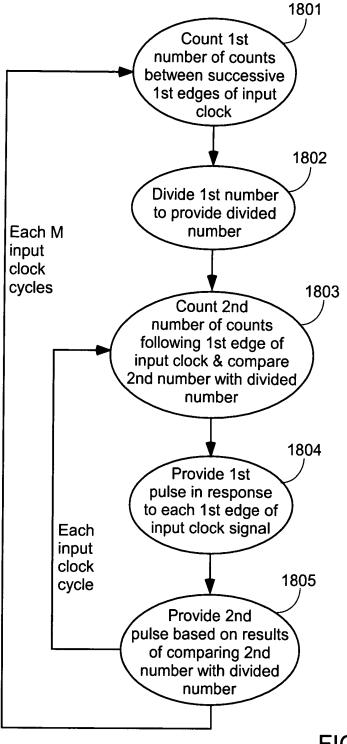


FIG. 18